

albuminuria and cylindruria. The excretion of phenolsulphonephthalein three days before death, while the patient was in coma, amounted to 63 per cent. Section revealed a small granular kidney. The third case was characterized by anasarca, small heart, and low blood pressure, considerable albumin and many casts in the urine. Death was sudden after a convulsion. Eleven days before, the phthalein test gave 57 per cent. output. The clinical diagnosis in last case was confirmed at section. In all the phenolsulphonephthalein test gave a figure approximating normal. Yet in view of the termination of the cases, one would hardly venture to assert that the renal function was normal. As to prognosis, this test would have indicated that recovery was almost certain. Foster questions whether the excretion of this drug does not depend on some other factor than pure renal disease, which by its presence or absence determines the rate of secretion by the kidney—as circulation or non-protein nitrogen in the blood. However, the same finding occurs with incoagulable nitrogen in the blood in uremia. Foster cites a case of death from uremia with a low normal estimation of non-protein nitrogen in the blood. He warns that the consideration of such methods of investigation as ultimate criteria leads into errors of diagnosis, narrowed medicine, and false ideas as to the pathology of a disease entity.

Chemical Nature of Eosinophilic Granules.—MÜLLER (*Wien. klin. Woch.*, 1913, 1025) found that if air-dried blood films are fixed for six hours in the incubator, submerged in a saturated aqueous solution of K_2MnO_4 without washing, then stained for several hours in Kultschitzky's hematoxylin solution and finally counterstained with Weigert's borax-ferrocyanide mixture until the red-blood cells are colorless, and the white cells appear as bright gray disks the eosinophilic granules then appear as brown or blue-black dots. After the action of various lipid solvents the granules will no longer stain black in the above method, though they retain their affinity for acid aniline dyes. This affinity is probably due to a protein complex—as demonstrated by Petry; but besides this, the granules probably are made up of some lipid constituents.

On the Effect of Opiates upon Peristalsis.—E. STIERLIN and N. SCHAPIRO (*München. med. Woch.*, 1913, lix, 2714) find that the x-ray studies of the effects of opium and its derivatives on peristalsis in the stomach and intestines, as reported in literature, are very conflicting. They have therefore, investigated the subject on man and on animals. Patients with fistulae of the small intestine and with cecal fistulae, as well as normal individuals have been studied. In a dog the small intestine was divided half-way between the stomach and large bowel. The upper half was implanted in the cecum, whereas the open end of the lower half was inserted in the abdominal wall. By this means it was possible to study the effect of the drug on the stomach and small intestine separately. Stierlin and Schapiro find that morphine has a variable action on gastric peristalsis. Usually in the young, moderate doses delay the emptying of the stomach several hours, even to twice the normal time. In adults, on the other hand, this action is much less marked and less constant. In 2 cases of hyper-

motility of the stomach, the emptying was even more rapid with opium than without it. In the small intestine they found a delay of the intestinal contents under the influence of morphine amounting to as much as seven hours. Often only the lower ileum remained filled longer than the normal time, suggesting a contraction of the sphincter at the ileocecal opening. No alteration could be discovered in the tonus of the small intestine. Upon the large bowel, no effect was observable, opium and pantopon acting in practically the same way as morphine. In chronic diarrhea with marked hypermotility of the small and large intestine, opium produces a slight retardation in the passage of the contents in the lower part of the small intestine; no effect was found on peristalsis of the large bowel down to the sigmoid flexure. The sigmoid remained filled longer than without the morphine. The constipating effect of opiates is due not so much to retardation of peristalsis as to dulling or inhibition of central defecation reflexes and the resulting delay of the contents in the sigmoid, Stierlin and Schapiro conclude.

Diastolic Ferments in the Urine.—(*Deut. Arch. f. klin. Med.*, 1913, iii, 164.) In making determinations of the diastatic ferments in the urine, according to Wohlgemut's method, NEUMANN calls attention to the fact that reliable estimations should be based upon the twenty-four-hour output. The total diastatic ferment amount, *per diem*, varies much with the same individual, and appears to be influenced more by psychic factors than by changes in the diet. Generally the diastatic power of the blood serum is less than that of the urine. This is found to be definitely decreased in diabetes mellitus, the amount of reduction being of some prognostic value. It is also diminished in pernicious anemia, Basedow's disease and in some forms of nephritis. The notable increase in pancreatic disease, is of real diagnostic worth. There is a slight increase in urinary diastase in some febrile conditions. Investigations carried out in a number of other diseases showed no great deviation from the normal.

Experimental Pathology and Therapy of Syphilis.—UHLENHUTH and MULZER (*Arch. u. d. Kais. Gesundh. Amt.*, 1913, xlv, 307) report a long and extensive series of investigations carried on in the field of experimental lues. Human luetic material was used, after numerous passages through dogs, a process which greatly increases the virulence of the spirochete and decreases the incubation time of the disease. Intravenous or intracardiac injections of such material in dogs, causes, in a high percentage of cases, generalized lues. In from six to ten weeks the animals become unkempt and lean. Soon there appear, especially in young animals, small, dark tumors about the nasal orifices, the end of the tail becomes knobby, and bean-like excrescences are common on the edges of the eyelids; these always in association with an intense conjunctivitis. These tumors, which commonly show superficial ulcerations, contain great numbers of spirochetes. Ulcerated papular syphilides may occur around the anus and vagina. In some instances the inoculation of extracts of various of the internal organs of such animals, into normal dogs, induced lues in the latter. Luetic testicles or the occurrence of eye manifestations seem to offer no protection